

تجميع لاختبار الإعادة  
جامعة الامام محمد بن سعود  
تخصص علوم حاسب  
١٤٤٠ / ٥ / ١١

كان كله اختياري من ٥٠ سؤال من المواد التاليه :

- Discrete math(5 questions)
- Programming (6 questions)
- Data structure (6 questions)
- Software engineer (5 questions)
- Operating system (5 question)
- Database (7 questions)
- Network (6 questions)
- Network security (5 questions)
- Artificial intelligence (5 questions)

## Discrete math

1- Which of the following statements is the negation of the statements “no student is present ” is :

- A. Students are present.
- B. no student is absent.
- C.
- D.

2- which is not valid statement ?

- A.
- B.
- C.
- D.

3- which is correct about sets:

- A.  $|A-B|=|B-A|$
- B.  $A-B = B-A$
- C.
- D.

4-  $P(A \cup B \cup C) =$

A.  $P(A) + P(B) + P(C) - P(A \cap B) - P(A \cap C) - P(B \cap C) - P(A \cap B \cap C)$ .

B.  $P(A) + P(B) + P(C) - P(A \cap B) - P(A \cap C) - P(B \cap C) + P(A \cap B \cap C)$ .

- C.
- D.

5- فكرت السؤال ان الطلاب عندهم سؤال فيه اربع اختيارات، والإجابة ممكن ( تكون اكثر من خيار، كم عدد الاحتمالات التي ممكن تكون إجابة صحيحة بشرط انه (مايخليه فاضي)

- 1- 15
- 2- 10
- 3- 64
- 4-

# Programming

1- What is the output of the following program:

```
public class Test{
    public static void main(String args[]){
        String s1 = new String("Hello");
        String s2 = new String("Hellow");
        System.out.println(s1 = s2);
    }
}
```

- A. Hello
- B. Hellow**
- C. Compilation error
- D. Throws an exception

2- What is the output of the following program:

```
public class testmeth
{
    static int i = 1;
    public static void main(String args[])
    {
        System.out.println(i+" , ");
        m(i);
        System.out.println(i);
    }
    public void m(int i)
    {
        i += 2;
    }
}
```

- A. 1 , 3
- B. 3 , 1
- C. 1 , 1
- D. 1 , 0

**Reason:** Parameter values are passed by value in the calling of a method, and so a copy of the value is created in the method, and the original value is not affected by the method call.

**2- When you pass an array to a method, the method receives \_\_\_\_\_ .**

- A. A copy of the array.
- B. A copy of the first element.
- C. The reference of the array.
- D. The length of the array.

**3- Which of the following statements is correct about constructors**

- A. A constructor must be declared as public.
- B. A constructor cannot be overloaded.
- C. we can named different of Class name.
- D. use to Create Object

**4- to prevent any method from overriding we declare the method as:**

- A. Abstract
- B. Static
- C. Final
- D. const

**Reason:** Final methods of the base class cannot be overridden in the derived Class.

## 5- Submarine.Dive(depth):

A. Dive must be method

B. Dive must be name of an instance field.

C. Submarine must be method.

D. Submarine must be the name of class.

**Reason:** The other choices can be allowed, but not 'must'

## Data structure

١- جا ثلاث أكواد اطلع منهم big O notation

٤- جا سؤالين عن السيرش

كانو جايبين جدول فيه أرقام ومحددين رقم بنهاية الجدول (كان ٥٧)  
وعليه سؤالين  
تقريباً الجدول كان زي كذا:

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
														57

السؤال الأول كان عن الباينري سيرش (Binary search): كيف رح  
يوصل للرقم ٥٧

- يمر بكم أندكس؟

وحاطين خيارات ولكن الجواب الصح ان الباينري رح تقسم الأري بالنص  
وتقارن.

السؤال الثاني كان عن اللينير سيرش (Linear Search): كيف رح  
يوصل للرقم ٥٧

- يمر بكم أندكس؟

اللينير رح تمر بكل الاندكس لين توصل للجواب.

**6- how many queue required for implement stack?**

- A. None.
- B. One queue
- C. Two queue
- D. Three queue

## Software engineer

**1- If requirements are easily understandable and defined then which model is best suited?**

- A. Spiral model
- B. Waterfall model
- C. Prototyping model
- D. None of the above

**2- UML Standard for:**

- A. Uniform Modeling Language
- B. Unified Modeling Language
- C.
- D.

**3- Which not in software life cycle**

- coding
- maintenance
- Testing
- Abstraction

**4- Which one of the following is not functional requirement**

- A. product feature
- B. performance
- C. stability
- D.

**5- Which of the following term describes testing?**

(السؤال ما جا كذا بالضبط ولكن نفس فكرته)

- a) Finding broken code
- b) Evaluating deliverable to find errors
- c) A stage of all projects
- d) None of the mentioned

## Operating system

**1- The Hardware mechanism that enables a device to notify the CPU is called \_\_\_\_\_.**

- A. Polling
- B. Interrupt
- C. System Call
- D. None of the above

**2- A major problem with priority scheduling is \_\_\_\_\_.**

- A. Definite blocking
- B. Starvation
- C. Low priority
- D. None of the above

**3- Which directory implementation is used in most Operating System?**

- A. Single level directory structure
- B. Two level directory structure
- C. **Tree directory structure**
- D. Acyclic directory structure

**4- Thrashing occurs \_\_\_\_\_.**

- A. **when excessive swapping takes place**
- B. when you thrash your computer
- C. whenever deadlock occurs
- D. when no swapping takes place

**5- In one of the deadlock prevention methods, impose a total ordering of all resource types, and require that each process requests resources in an increasing order of enumeration. This violates the \_\_\_\_\_ condition of deadlock**

(السؤال ما كان بنفس هالصيغة ولكن كان عن الديلوك ونفس هالاختيارات)

- A. Mutual exclusion
- B. Hold and Wait
- C. **Circular Wait**
- D. No Preemption



## Database

1- The \_\_\_\_\_ clause is used to delete Database.

- A. Drop
- B. remove
- C. Delete
- D.

2- The \_\_\_\_\_ clause is used to modify structure of DB.

- A. alert
- B.
- C.
- D.

3- data distributed سؤال عن

4- data transaction سؤال عن

5- Group by سؤال وش تسوي الـ

6- select سؤال عن

7-

## Network

**1- Which layer responsible for transfer datagram from node to node by link?**

- A. Network
- B. Transport
- C. Data Link
- D. None

**2- utilization of network address:**

**3- UDP:**

- A. checksum
- B. Three hand shaking
- C.

**3- DHCP assigned:**

- A. Port Number.
- B. IP Address.
- C. Send connection to server
- D.

**4-**

**5-**

**6-**

## Network security

1- The asymmetric key cryptography can be used in:

- A. digital signature
- D. key exchange
- C. encryption and decryption
- D. All of above

2- as a security expert, you received a call from some one said payroll change last month in an organization. What is the crucial components of security is:

- A. message integrity
- B. Confidentiality
- C. Availability
- D.

3- caesar cipher سؤال عن

نفاك التشفير لجملة

key = 23

يعني نحرك كل حرف ٢٣ وبالأخير تطلع هالجملة:

A. Encryption Text

4-

5-

## Artificial intelligence

**1- Algorithms that Expand level i before i+1:**

- A. DFS
- B. BFS**
- C. U
- D. None

**2- Discrete function is**

- A. Classification
- B. regression
- C. Bias
- D. None of above

**3- Chess with time** (السؤال ناقص ولكن يسأل عن الشطرنج)

- A. fully observable**
- B. partially observable

**4-  $\sim(P \vee q) =$**

- A.  $(\sim p \wedge \sim q)$**

**5-**

مراجع لبعض الأسئلة :

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